

**Remarks**

**A. Pending Claims**

Claims 15-34 are pending. Claims 15, 16, 18, 20, 21, 24-28, 30-32, and 34 have been amended for clarity.

**B. The Claims Are Not Anticipated by Sertich Pursuant To 35 U.S.C. §102(b)**

Claims 15-18, 21-24, 27-31, and 33 were rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 5,800,550 to Sertich (hereinafter “Sertich”). Applicant respectfully disagrees with these rejections. As noted in the Office Action mailed September 24, 2007, the claims in a pending application should be given their broadest, reasonable interpretation. Applicant believes the interpretation of the expansion of the spikes of Sertich being the same as the claimed expansion of the intervertebral implants would not be reasonable to a person of ordinary skill in the art to which the application is directed. In the interest of expediency, selected claims of the application have been amended to clarify that certain surfaces of the claimed intervertebral implants are support surfaces for vertebrae, which function the spikes of Sertich do not perform. The spikes of Sertich do not inhibit movement of a first vertebra coupled to the spikes towards a second vertebra. Also, the claims have been amended to remove method functionality (such as “moving” and “allowing”) from the claims. Support for the amendments to the claims is found at least in Figures 12a-12i in combination with the teaching of Figure 8.

**C. The Claims Are Not Obvious Over Sertich In View of Larsen et al. Pursuant To 35 U.S.C. §103(a)**

Claims 19, 25, and 32 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sertich in view of U.S. Patent No. 5,782,832 to Larsen et al. (hereinafter “Larsen”). Applicant respectfully disagrees with this rejection.

To reject a claim as obvious, the Examiner has the burden of establishing a *prima facie* case of obviousness. *In re Warner et al.*, 379 F.2d 1011, 154 USPQ 173, 177-178 (C.C.P.A. 1967). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974), MPEP §2143.03.

The Office Action states:

Sertich discloses the invention substantially as claimed, however, Sertich does not disclose a raised portion of the inferior surface of the cage that will inhibit backout of the expansion member. Larsen et al. teaches such a projection in col. 8, lines 8-29 for the purpose of traversing movement with the interior of the implant. Thus it would have been obvious to one of ordinary skill in the art at the time the invention to include a raised portion of the inferior surface of the cage in order to inhibit backout of the expansion member by traversing movement with the interior of the implant.

Claims 19, 25, and 32 state in part, “wherein an interior surface of the cage element comprises a raised portion configured to inhibit backout of the expansion member after expansion of the intervertebral implant.”

Sertich in combination with Larsen does not appear to teach or suggest the combination of features of the claims 19, 25, and 32. As conceded in the Office Action, Sertich does not disclose a raised portion of the inferior surface of the cage that will inhibit backout of the expansion member. Larsen does not teach or suggest the combination of feature of the claims including, but not limited to, the feature of: “an interior surface of the cage element comprises a raised portion configured to inhibit backout of the expansion member after expansion of the intervertebral implant.” As shown in FIG. 21, Larsen appears to teach pyramid-shaped projections on the exterior surface of the implant to engage vertebra. For example, Larsen states:

Referring now to FIGS. 21-24, there is illustrated another alternate embodiment of the spinal implant of the present disclosure. Implant 400 includes two support members, i.e., upper support member 402 and lower support member 404 having respective contacting surfaces 406, 408. Each contacting surface 406, 408 has a plurality of pyramid-shaped projections 410 which facilitate engagement with the vertebral end plates of the adjacent vertebrae "V<sub>1</sub>, V<sub>2</sub>" upon

insertion within the intervertebral space "i".  
(Larsen, column 8, lines 8-16).

Since Sertich does not appear to teach an expansion member and Larsen appears to only teach projections on the exterior surface of the implant to engage vertebra, Applicant submits there is no motivation or teaching in Sertich or Larsen to include a raised portion on the interior surface of the cage element configured to inhibit backout of the expansion member after expansion of the intervertebral implant.

The features of claims 19, 25, and 32 including, but not limited to, the combination of feature of: "an interior surface of the cage element comprises a raised portion configured to inhibit backout of the expansion member after expansion of the intervertebral implant" does not appear to be taught or suggested by Sertich in combination with Larsen. Applicant respectfully requests removal of the rejection to claims 19, 25, and 32.

Claims 20, 26, and 34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sertich in view of Fleischmann et al. Claims 20, 26, and 34 have been amended. Support for the amendments to claims 20 and 26 is shown at least in Figure 12c and Figure 12e. Support for the amendment to claim 34 is shown at least in Figure 12i. Applicant believes that the features of claims 20, 26, and 34 are not taught or suggested by Sertich at least for the reasons presented in Section B above, and that the features are not taught or suggested by Sertich in light of the cited art. Applicant respectfully requests removal of the rejections of claims 20, 26, and 34.

**D. Additional Comments**

Applicant submits that all claims are in condition for allowance. Favorable consideration is respectfully requested.

A Fee Authorization for the Request For Continued Examination Fee will be submitted as a separate document upon electronic filing of this and accompanying documents. If an extension of time is required, Applicant hereby requests the appropriate extension of time. If any

additional fees are required, please appropriately charge those fees to Meyertons, Hood, Kivlin, Kowert & Goetzl, P.C. Deposit Account Number 50-1505/5943-00300/EBM.

Respectfully submitted,

A handwritten signature in cursive script that reads "David W. Quimby".

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